

Amendments to the Specification:

Please replace paragraph appearing at page 4, lines 8-12 with the following amended paragraph:

In at least one of the image processing circuits, with the distortion correcting method as described with reference to [[Fig.]] Figs. 56 to 58, the following distortion correcting formula [Formula 5] optically expressed is used, thereby correcting the distortion aberration of the picked-up image.

Please replace paragraph appearing at page 36, lines 22-25, bridging to page 37, at lines 1-11 with the following amended paragraph:

Fig. 10 shows a setting method of the width of block line. Referring to Fig. 10, an example of varying the width of block line depending on the target position of the distortion correction processing is shown. A bent broken line denotes the data with the distortion on the input side having a larger degree of distortion as the position is apart i.e., further from the center of the image, that is, the position is near the outside. Therefore, upon setting the width of block line to the input data on the frame memory, the width is larger as the position is apart i.e., further from the center of the image, and the width is smaller as the position is near the center of the image. Thus, upon transferring the data to the image processing circuit from the frame memory 5 via the bus 3, if the data width is smaller, the time using the bus is short.

Please replace paragraph appearing at page 41, lines 23-25, bridging to page 42, at lines 1-9 with the following amended paragraph:

Fig. 14 is a flowchart for explaining the operation of distortion correction processing. In step S11, the correcting magnification M in [Formula 1] for distortion correction is determined. The determination method of the correcting magnification M will be described later with reference to a flowchart in Fig. 15. In step S12, by using the determined correcting magnification M , the input range necessary for the processing of the block line is calculated in consideration of the part necessary for the interpolation, as described above with reference to Figs. 10 to 13. In step S13, the calculated input range and the setting value necessary for the distortion correction processing are set. In step S14, the distortion correction processing of every block line and the calculation of the input range of the next block line are simultaneously executed. After that, until correcting the distortion of the block line on the most down stage of the image, the distortion correction processing of every block line and the calculation of the input range of the next block line are executed. In step S15, it is determined whether or not the distortion correction processing for all output images ends, thereby repeating step S14. The processing continues until ending the distortion correction processing of the entire image, and then ends.